THE SOUND THAT CREATES LEGENDS

# ‘65 TWIN REVERB OWNER’S MANUAL

*P/N 037969*

# INTRODUCTION

Your "new"'65 TWIN REVERB amplifier is living proof of the quality and longevity of Fender amplifier designs.

Of all the Fender amplifiers produced over the past 40 years, the Twin Reverb has truly established itself as the "industry standard" for combo/self-contained amplifiers. The Twin Reverb has been used on thousands of recordings and countless live performances since 1954 when the first version (The Twin Amp) appeared on the music scene. Over the years, Twin Reverbs have proven to be incredibly versatile, being used for guitar, bass, keyboards, vocals (yes even vocals), accordion, electric violin and an amazing array of other electrified instruments. The Twin Reverb has always been able to produce "the right sound".

Your new '65 TWIN REVERB is a faithful reproduction of an original 1965 Twin Reverb (model AB 763 for historical or technical types). Every effort has been made to keep the pre-amp and power amp circuits exactly like the original. For improved reliability and manufacturing efficiency, a printed circuit board for the components is used in place of the original "Leo board" style phenolic parts panel used in the older Fender amplifiers for many years. The power and output transformers used in the '65 TWIN REVERB are built to the original specifications which were still in the Fender R&D department files. Some components used in this re- issue amplifier are different in size and shape from the earlier version, but the component values are identical.

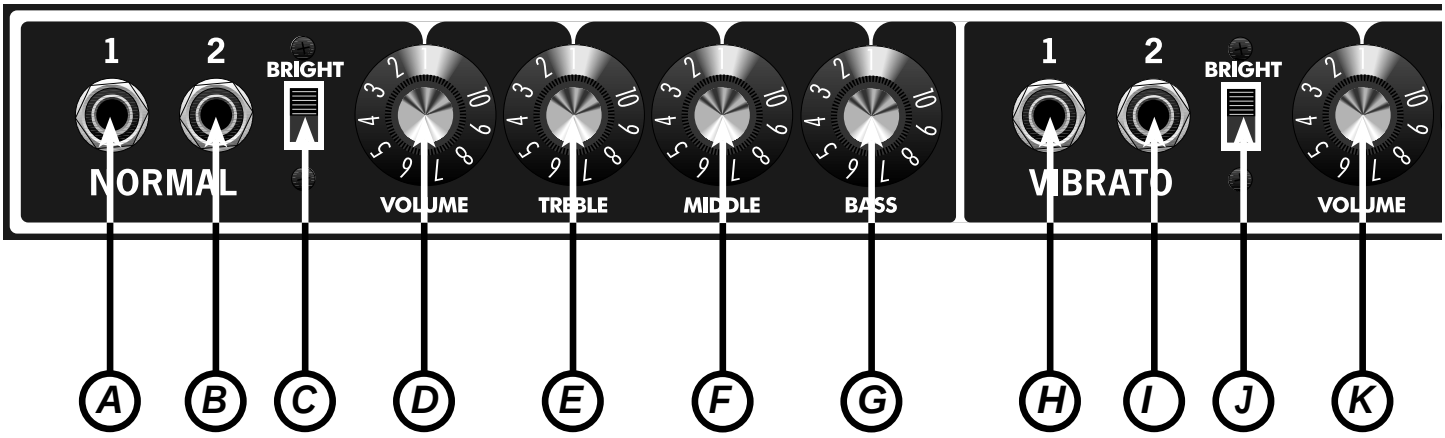
The '65 TWIN REVERB is 85 watts, like the original. This model (AB 763) is often referred to as a "Black- face Twin" (because of the control panel's color) and was first introduced in mid 1963 and continued until mid 1968 when the control panel was changed to the silver swirl look that lasted through 1980.

The speakers in the '65 TWIN REVERB are duplicates of the original Jensen 12 inch "Specially Designed for Fender" speakers used for many years during the 1960s.

Please note, if you compare a new '65 TWIN REVERB with an original model, the two units may sound slightly different. Remember the speakers and filter capacitors in the original are over 25 years old and their performance has changed over the years.

It is suggested you read this manual thoroughly to understand all the features and functions of the .amplifier. The purchase of a Fender amplifier will provide years of musical enjoyment and the '65 TWIN REVERB helps keep the Fender legend going strong.

**WARNING:** TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE AMPLIFIER TO RAIN OR MOISTURE!




# '65 TWIN REVERB FRONT PANEL FUNCTIONS

**A, B. NORMAL CHANNEL INPUTS-**Plug-in connection for instruments. Input 1 provides 6 dB more gain than input 2. The REVERB and VIBRATO features do not affect the NORMAL CHANNEL.

**C. BRIGHTNESS SWITCH-**This switch provides an extra boost to the high frequency response of the NORMAL CHANNEL. The effect is especially noticeable at lower volume settings.

**D. NORMAL CHANNEL VOLUME CONTROL-**Adjusts the overall loudness of the NORMAL CHANNEL.

**E. TREBLE CONTROL-**Adjusts the amount of high frequency boost (accentuation) or cut (attenuation) on the NORMAL CHANNEL.

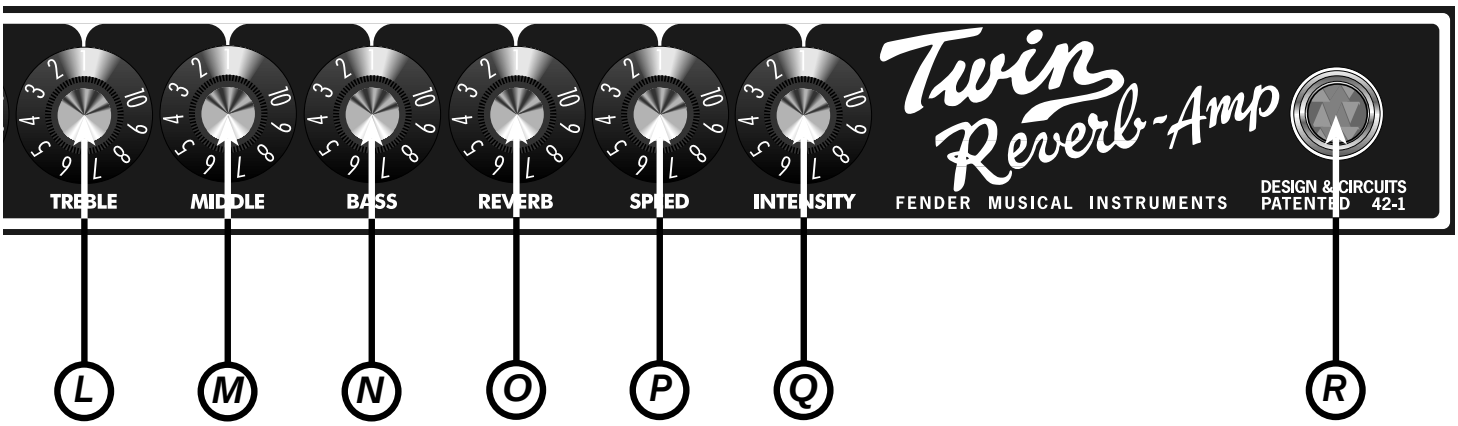
**F. MIDDLE CONTROL-**Adjusts the amount of mid-range frequency boost or cut in the NORMAL CHANNEL.

**G. BASS CONTROL-**Adjusts the amount of low frequency boost or cut in the NORMAL CHANNEL.
**Note:** If all tone controls are full counter-clockwise, there will be no sound.

**H. I. VIBRATO CHANNEL INPUTS-**Plug-in connection for instruments. Input 1 provides 6 dB more gain than input 2. The VIBRATO CHANNEL is affected by both the REVERB and VIBRATO features, and also provides more treble boost than the NORMAL CHANNEL.

**J. BRIGHTNESS SWITCH-**This switch provides an extra boost to the high frequency response of the VIBRATO CHANNEL. The effect is especially noticeable at lower volume settings.

**K. BRIGHT CHANNEL VOLUME CONTROL-**Adjusts the overall loudness of the VIBRATO CHANNEL.




**L.** **TREBLE CONTROL-**Adjusts the amount of high frequency boost or cut in the VIBRATO CHANNEL.

**M.** **MIDDLE CONTROL-**Adjusts the amount of mid-range frequency boost or cut in the VIBRATO CHANNEL.

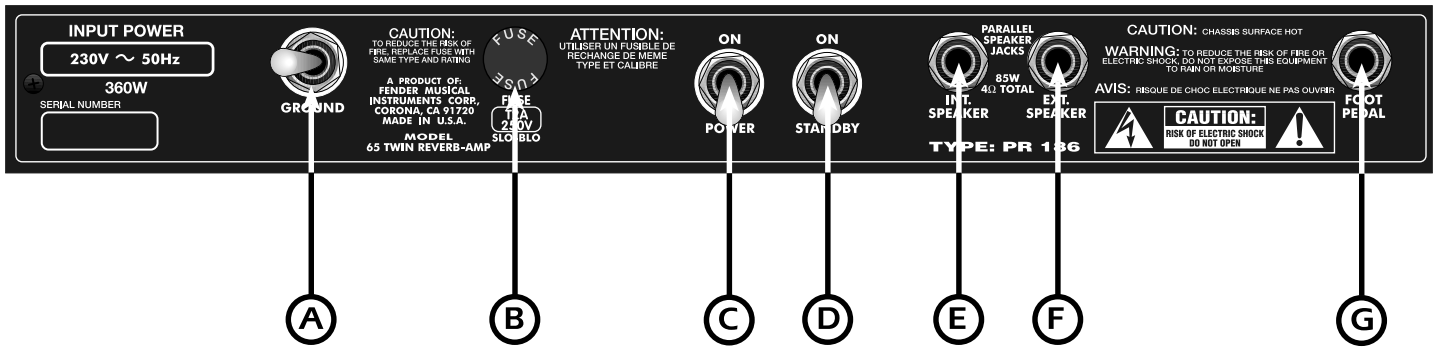
**N.** **BASS CONTROL-**Adjusts the amount of low frequency boost or cut in the VIBRATO CHANNEL.
**Note:** If all tone controls are full counter-clockwise, there will be no sound.

**0.** **REVERB CONTROL-**Adjusts the amount of reverberated signal that is mixed in with the original dry signal. Turning the control full counter-clockwise turns the REVERB feature off. The REVERB feature can also be turned on and off using the footswitch. Note that the REVERB feature does not affect the NORMAL CHANNEL.

**P.** **VIBRATO SPEED CONTROL-**Adjusts the speed of the VIBRATO feature. Note that the VIBRATO feature does not affect the NORMAL CHANNEL.

**0.** **VIBRATO INTENSITY CONTROL-**Adjusts the intensity of the VIBRATO feature. Turning the control full counter-clockwise turns the VIBRATO feature off. The VIBRATO feature can also be turned on and off using the footswitch. Note that the VIBRATO feature does not affect the NORMAL CHANNEL.

**R.** **PILOT LAMP-**When the lamp is illuminated, the '65 TWIN REVERB is receiving power. Should the lamp burn out, unscrew the red jewel and replace the lamp with a type T47 light bulb.




# '65 TWIN REVERB REAR PANEL FUNCTIONS

**A. GROUND SWITCH -** Set the GROUND SWITCH to the position that produces the least amount of "buzz" or "hum" from the speakers.

**B. FUSE-**The fuse is in the AC supply of the amplifier and will help to protect the amplifier and operator in the event of an electrical fault. If a fuse blows, it should only be replaced with a fuse in accordance with the listing at the fuse holder. If the amplifier repeatedly blows fuses, it should be checked out by a qualified technician. UNDER NO CIRCUMSTANCES should a fuse of a different type, higher current rating, or a fuse bypass be used, as this could damage the equipment and present a serious safety hazard.

**C. POWER SWITCH-This** switch turns the AC power ON and OFF. When the switch is OFF, the amplifier is completely shut down.

**D. STANDBY SWITCH-This** switch turns the amplifier on and off. In the STANDBY position, the amplifier is off; however, power is applied to the tube filaments so as to eliminate warm-up time. Use of this feature during short breaks versus using the POWER SWITCH will increase tube life.

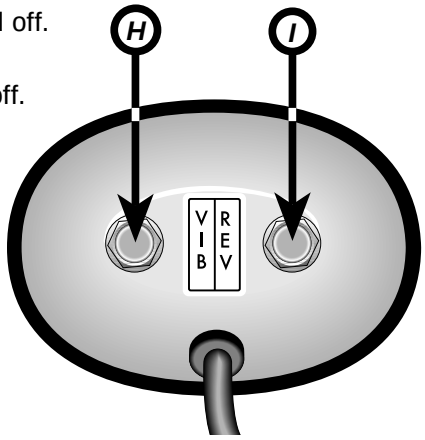
**E. MAIN SPEAKER JACK-** Plug-in connection for speakers. This jack must always be used as the primary connection to speakers.

**F. EXTERNAL SPEAKER JACK-** Plug-in connection for an external speaker. This jack is wired in parallel with the MAIN SPEAKER JACK, and must only be used in conjunction with the MAIN SPEAKER JACK. Should the EXTERNAL SPEAKER JACK be used without also using the MAIN SPEAKER JACK, there will be no sound. Note that the amplifier is optimized for a 4 ohm speaker load, and that the speakers in the cabinet are wired for 4 ohms. Should a total load of more or less than 4 ohms be used, the amplifier will not put out its maximum power output before distortion occurs.

**G. FOOTSWITCH JACK-** Plug-in connection for the footswitch. The footswitch allows you to turn the VIBRATO and REVERB features on and off without having to operate the controls on the front panel. Note that only the REVERB feature will operate without plugging in the footswitch.

**H. VIBRATO SWITCH-Push** on, push off switch that turns the VIBRATO feature on and off.

**I. REVERB SWITCH -**Push on, push off switch that turns the REVERB feature on and off.



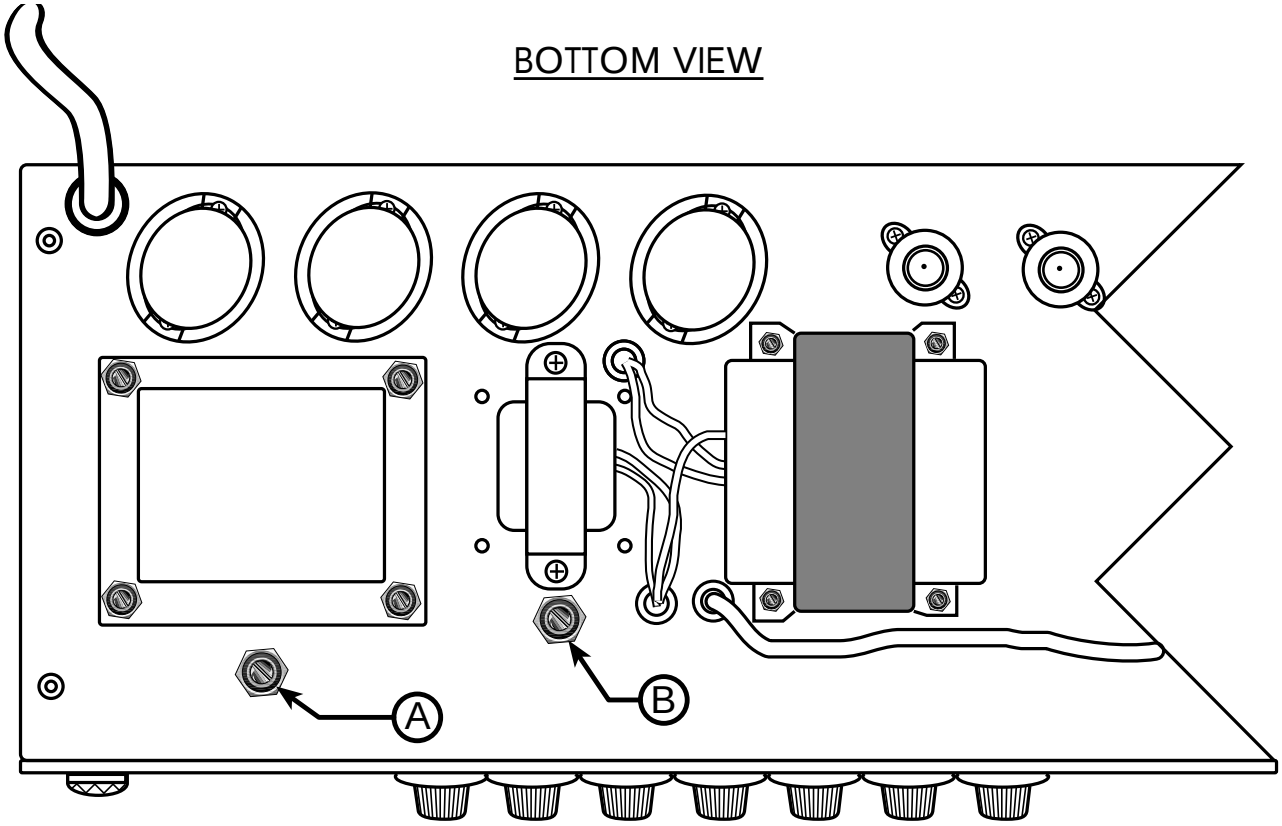
# ADJUSTMENTS

**A. HUM BALANCE ADJUSTMENT-This** adjustment minimizes hum heard at the speakers. It is set at the factory, and needs to be adjusted only if any of the smaller tubes, especially any of the 12AX7As, are replaced. Before making the adjustment, be sure that the hum or buzz cannot be eliminated by toggling the ground switch.

To make adjustment: With nothing plugged into the amplifier, rotate the VIBRATO CHANNEL volume, middle, and bass controls full clockwise. Rotate the VIBRATO CHANNEL treble control, and all the NORMAL CHANNEL controls full counter-clockwise. Turn REVERB and VIBRATO features off.

Insert a slotted screwdriver into the HUM BALANCE CONTROL and rotate it back and forth until you find the null (setting of minimum hum). If you have any questions, consult your authorized Fender Service Center.

**B. BIAS ADJUSTMENT-This** is a factory adjustment only. Should the bias need adjusting, it should be performed by your authorized Fender Service Center.



## LINE CORD

Your amplifier is equipped with a grounding type supply cord to reduce the possibility of shock due to electrical fault. Be sure to connect it to a grounded receptacle. Operation from an ungrounded (two-pronged) AC receptacle requires a three-to-two contact grounding type adapter. Be sure to connect the adapter's grounding lead to a good earth ground. **DO NOT ALTER THE AC PLUG.**

## TUBES

The '65 TWIN REVERB tube complement consists of four Fender Special Design 6L6GCs (part number 023556), four Fender Special Design 12AX7As (part number 013341), and two Fender Special Design 12AT7s (part number 023531). Fender's Special Design Tubes provide optimum performance in this amplifier. For best results, replace with Fender original equipment tubes only. Tube location is printed on the tube label, inside the cabinet.

## BLACK TOLEX COVERING CARE

The exclusive Fender Tolex covering on your cabinet is especially designed to provide years of lasting beauty. A very light soapy solution on a sponge may be used to remove dirt and residue that may accumulate in the grain. Be careful not to let any liquid come in contact with operating surfaces. DO NOT have the amplifier plugged into a power outlet when cleaning.

### TROUBLESHOOTER'S CHECKLIST

If the amp is set up but does not function, check the following items:

- Is the amp power cord properly plugged into an electrical outlet?
- Is there power at the outlet?
- Is the fuse blown?
- Are the speakers properly connected to the amplifier?
- Is the amp on standby?
- Are the amplifier volume and tone controls turned up above "three"?
- Is the volume control on the instrument turned up?
- Is your instrument properly plugged into the amplifier?
  (Eliminate any effects pedals and try another guitar cord.)

If, after checking all of the above, the system is not performing correctly, consult your Fender Service Center.

### '65 TWIN REVERB SPECIFICATIONS

| | |
|---|---|
| **PART NUMBER:** | 21- 7300. |
| **DIMENSIONS:** | HEIGHT: 19-7/8" (49.2 cm). |
| | WIDTH: 26-5/32" (63.5 cm). |
| | DEPTH: 10-3/8" (21.9 cm). |
| **WEIGHT:** | 64 lb. (29 kg). |
| **POWER OUTPUT:** | 85 watts R.M.S. minimum into 4 ohms. |
| **OUTPUT IMPEDANCE:** | 4 ohms. |
| **INPUT IMPEDANCE:** | Input 1, both channels: 1M ohms. |
| | Input 2, both channels: 136k ohms. |
| **FEATURES:** | Vibrato and Reverb, Tilt-back legs. |
| **POWER REQUIREMENTS:** | 120 volts AC, 60 Hz, 2.17 amperes, 260 watts. |
| **FUSE TYPE:** | 4 ampere, slow-blow, 125 volt minimum. |
| **SPEAKER COMPLIMENT:** | (2) P/N 037617 12" Fender vintage re-issue speakers, |
| | designed to match the "Special Design" speakers of the mid 1960s. |
| **SOUND:** | Legendary, and loud! |

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**BREA, CA 92621**